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SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
08/230,012	04/19/94	SOUTHERN	E 263PPIR7644U

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18M2/1028

EXAMINER	
MARSCHEL, A	
ART UNIT	PAPER NUMBER
1809	31

DATE MAILED: 10/28/96

Please find below a communication from the EXAMINER in charge of this application.

Commissioner of Patents

Office Action Summary

Application No.

08/230,012

Applicant(s)

Southern

Examiner

A. Marshall

Group Art Unit

1809

☒ Responsive to communication(s) filed on

5-28-96 and 8-19-96

☐ This action is FINAL.☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s)

41-52 and 54-62

is/are pending in the application.

Of the above, claim(s)

is/are withdrawn from consideration.

☒ Claim(s)

44-48

is/are allowed.

☒ Claim(s)

41-43, 49-52, 54, 57, and 59-62

is/are rejected.

☒ Claim(s)

55, 56, and 58

is/are objected to.

☐ Claims

are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.☐ The drawing(s) filed on _____ is/are objected to by the Examiner.☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.☐ The specification is objected to by the Examiner.☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been☐ received.☐ received in Application No. (Series Code/Serial Number) _____.☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892☒ Information Disclosure Statement(s), PTO-1449, ~~Repor. Notes~~ 5 sheets☐ Interview Summary, PTO-413☐ Notice of Draftsperson's Patent Drawing Review, PTO-948☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

The art unit designated for this application has changed. Applicant(s) are hereby informed that future correspondence should be directed to Art Unit 1809.

Applicant's arguments; filed 5/28/96 and 8/19/96, have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either newly applied or reiterated. They constitute the complete set presently being applied to the instant application.

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 41-43, 49-52, 54, 57, and 59-62 are rejected under 35 U.S.C. § 103 as being unpatentable over Dattagupta et al. (0,235,726; ref AI) taken in view of Gingeras et al. (WO 88/01302; ref. CI).

Dattagupta et al. disclose the reverse Southern type of hybridization analysis on solid supports including the immobilization of separate probes on solid supports in the SUMMARY OF THE INVENTION on pages 3-4. Page 9 of Dattagupta et al. disclose in lines 25-33, the covalent and noncovalent immobilization of probes with a matrix of spots cited in lines 53-58. This suggests the generic attachment of probes to solid supports but lacks specific attachment chemistry.

Gingeras et al. disclose the chemistry of attachment to a variety of supports including short probes as well as terminal attachment summarized in the abstract and throughout the disclosure.

Thus, it would have been obvious to someone of ordinary skill in the art at the time of the instant invention to practice reverse Southern type assays with a variety of probes including a matrix of spots arrangement because Dattagupta et al. disclose the generic reverse Southern assay method and apparatus and Gingeras et al. describes various immobilization methods as given in the instant claims.

Claims 55, 56, and 58 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 44-48 are allowed.

Papers related to this application may be submitted to Group 1800 by facsimile transmission. Papers should be faxed to Group 1800 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in

Serial No. 08/230,012

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Art Unit: 1809

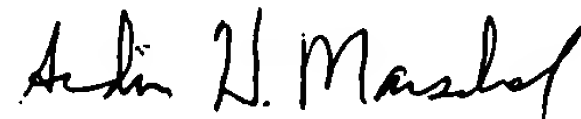
the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993) (See 37 CFR § 1.6(d)). The CMI Fax Center number is either (703) 305-3014 or (703) 308-4227.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ardin Marschel, Ph.D., whose telephone number is (703) 308-3894. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Elliot, can be reached on (703) 308-4003

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

October 28, 1996



ARDIN H. MARSCHEL
PATENT EXAMINER
GROUP 1800